DOCUMENT RESUME

ED 211 059 IR 009 874

AUTHOR Gadzella, Bernadette M.
TITLE A CAI Study Skills Program.
PUB DATE 22 Oct 81
NOTE 9p.; Paper presented at the Annual Meeting of the Rocky Mountain Educational Research Association (Dallas, TX, October 22, 1981).

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS *Computer Assisted Instruction; Higher Education; *Learning Modules; *Program Effectiveness; Secondary Education; Study Guides; *Study Skills; Testing

ABSTRACT

This paper describes a computer assisted instruction (CAI) study skills program and reports the results of a study conducted to determine its effectiveness. The program consists of ten CAI study skills modules, a CAI study skills notebook, and a CAI study skills test. The modules address (1) managing time, (2) improving memory, (3) taking lecture notes, (4) reading textbooks, (5) taking examinations, (6) writing themes and reports, (7) making oral reports, (8) improving scholastic motivation, (9) improving interpersonal relations, and (10) improving concentration. Each module is followed by a 10-point multiple choice quiz. The notebook is systematically integrated with the modules and assists the students in making notes as they go through the program. The CAI study skills test consisting of 200 true and false statements was administered to 60 university students as both a pretest and a posttest. Students scored significantly higher on the posttest than on the pretest and indicated that they had learned a great deal from the program and recommended it to other students. A table of the results on the pre- and posttests for the 60 students and a bibliography of 18 items are included. (CHC)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED211059

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☒ This document has been reproduced as received from the person or organization originating it.
☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official NIE position or policy.

A CAI STUDY SKILLS PROGRAM

Bernadette M. Gadzella, Ph.D.

East Texas State University

Commerce, Texas

paper presented

at the

Rocky Mountain Educational Research Association Meeting

held at

Dallas, Texas

on

October 22, 1981.

IR009874

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY
Bernadette M.Gadzella

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

Running head: A CAI Study Skills

The need for systematic training to improve study skills has been recognized for years. Numerous research studies (Brown, 1974; Brown, Wehe, Zunker, and Haslam, 1971; Brown and Zunker, 1966; Gadzella, 1980; Gadzella, (in press); Gadzella, 1979; Gadzella, 1979(b); Gadzella and Cochran, 1979; Gadzella, Goldston, and Zimmerman, 1977; Haslam and Brown, 1968; Jones, Trimble, and Altman, 1970; Light and Alexakos, 1970; Rubin and Cohen, 1974; Tarpey and Harris, 1970) that have been conducted on study skills show that instructions on study skills significantly affect students' scholastic behavior, motivation and performance. Researchers have used various methods in attempting to disseminate information on effective study skills, e.g. classroom instruction, group guidance, and individual counseling. The individual counseling approach provides a greater opportunity for the student to become involved in the learning process and, thus, increases the probability of making learning more meaningful. However, the individual counseling approach is very time-consuming and, thus, makes it both difficult and expensive to offer well-designed programs to all students. Therefore, educators and researchers have been concerned with finding alternative ways to effectively and efficiently present information on effective study skills to all students who want and need it.

The belief that effective study skills and positive attitudes could be learned through computer-assisted instructions (CAI) led to the development of CAI modules on study skills. The initial set of 13 modules on study skills was field-tested. Students who went through the modules provided data and suggestions for improving the modules and the program. With the data and suggestions, a CAI study skills program was developed.

The purpose of this presentation is to impart the information concerning the CAI study skills program. It is the hope that many students will have the opportunity to go through the program and develop more effective study skills and positive attitudes.

Program

The CAI study skills program consists of the CAI Study Skillls Modules (Gadzella, Brown, and Cochran, 1981), CAI Study Skills Notebook (Brown, Gadzella, Forristall, and Cochran, 1981) and the CAI Study Skills Test (Brown and Gadzella, 1981). Ten modules were developed by adapting the concepts presented in Student's Guides to Effective Study (Brown, 1975) under the following topics: (1) managing time, (2) improving memory, (3) taking lecture notes, (4) reading textbooks, (5) taking examinations, (6) writing themes and reports, (7) making oral reports, (8) improving scholastic motivation, (9) improving interpersonal relations, and (10) improving concentration. At the end of each of the modules, there is a 10-point multiple-choice quiz. The purpose of the quizzes is to reinforce students' understandings of the materials they learned in the modules.

The CAI Study Skills Notebook is systematically integrated with the CAI Study Skills Modules. The Notebook assists the students to make their own notes as they go through the program. The CAI Study Skills Test consists of 200 True and False statements on the materials presented in the Modules. Twenty statements in the Test measure each of the topics in the Modules. That is, the Test has ten scales and an overall effective study skills scale. The answer sheets for the Test are designed so that the scores for each of the scales are readily obtained. The scores for each of the scales are then entered on the profile.

Procedure

The CAI study skills program consists of first administering the pre-test (CAI Study Skills Test) to the students. The test is scored and the data are interpreted to the students. Then, students go through the CAI Study Skills Modules and complete the exercises in the CAI Study Skills Notebook. After completing the ten modules and the exercises in the Notebook, students are asked to take the posttest (CAI Study Skills Test). The test is scored, data are entered on the profile, and information is given to the student on an individual basis. Other data can be retrieved from the computer, such as: time students spent one each module, scores students obtained on each quiz, etc.

Subjects

During the 1981 Spring Semester, 60 university students completed the CAI study skills program either as a two credit-hours course or as a project for a class. Students were undergraduates enrolled in educational psychology classes.

Results

In order to determine the effectiveness of the CAI study skills program, the data from the pre- and posttests of the CAI Study Skills Test were analyzed using the t-test. The results (Table 1) show that on the ten scales of the Test, students scored significantly ($p < .002$) higher on the post-test. These results concur with previous research findings (Brown, 1974; Brown, Wehe, Zunker, and Haslam, 1971; Brown and Zunker, 1966; Gadzella, 1980; Gadzella, (in press); Gadzella, 1979; Gadzella, 1979(b); Gadzella and Cochran, 1979; Gadzella, Goldston, and Zimmerman, 1977; Haslam and Brown, 1969; Tarpey and Harris, 1970) where students received instructions on study skills. In the present study, students were also given the opportunity to

evaluate the program. Students indicated that they got a great deal from the program and recommended it highly to other students.

Conclusion

The CAI study skills program is made available to four-year colleges and universities as well as high schools and junior colleges. It is the hope tht students who want and need the instructions on study skills will have access to the program and that instructors will provide the opportunities for students to apply these skills in their classes.

Table 1

RESULTS ON CAI STUDY SKILLS TEST FOR 60 STUDENTS

Scale	Pretest				t-test	p
	M	SD	M	SD		
1. Managing Time	16.67	1.85	18.05	1.62	5.91	0.000
2. Improving Memory	17.35	1.97	18.42	1.39	4.30	0.000
3. Taking Lecture Notes	15.90	1.88	17.48	1.98	6.23	0.000
4. Reading Textbooks	16.97	2.31	18.18	1.64	4.92	0.000
5. Taking Examinations	16.45	2.26	17.37	1.87	3.29	0.002
6. Writing Themes and Reports	16.15	1.83	17.62	2.03	6.49	0.000
7. Improving Oral Reports	14.25	2.19	16.02	2.12	5.49	0.000
8. Improving Scholastic Motivation	16.65	2.04	18.05	1.51	6.20	0.000
9. Improving Interpersonal Relations	14.8	2.88	17.00	2.35	6.20	0.000
10. Improving Concentration	15.80	2.42	17.93	1.69	8.11	0.000
Total Study Skills	161.85	14.83	176.30	13.11	11.06	0.000

REFERENCES

Brown, W. F. Effectiveness of paraprofessionals: The evidence. Personnel and Guidance Journal, 1974, 53, 247-263.

Brown, W. F. Student's guides to effective study. San Marcos, Texas: Effective Study Materials, 1975.

Brown, W. F., and Gadzella, B. M. CAI Study Skills Test. San Marcos, Texas: Effective Study Materials, 1981.

Brown, W. F., Gadzella, B. M., Forristail, D.Z., and Cochran, S. W. CAI Study Skills Notebook. San Marcos, Texas: Effective Study Materials, 1981.

Brown, W. F., Wehe, N. C., Zunker, N. G., and Haslam, W. F. Effectiveness of student-to-student counseling on the academic adjustment of potential college dropouts. Journal of Educational Psychology, 1971, 62, 285-289.

Brown, W. F., and Zunker, V. G. Student counselor utilization at four year institutions of higher learning. Journal of College Student Personnel, 1966, 64, 41-46.

Gadzella, B. M. A comparison of CAI and class instruction approaches on study skills. Paper presented at the Third Annual Southwest Educational Research Meeting, San Antonio, Texas, 1980. (Published by ERIC, 1980.)

Gadzella, B. M. Computer-assisted instruction on study skills. Journal of Experimental Education (in press).

Gadzella, B. M. The effects of student-to-student counseling on students' perceptions of study skills and attitudes. Journal of College Student Personnel, 1979, 20, 424-430.

Gadzella, B. M. The effectiveness of the CAI program on study skills. Paper presented at the International Congress for Individualized Instruction, Athens, Georgia, 1979(b).

REFERENCES (Continued)

Gadzella, B. M., Brown, W. F., and Cochran, S. W. CAI study skills modules. San Marcos, Texas: Effective Study Materials, 1981.

Gadzella, B. M., and Cochran, S. W. Sex differences when CAI study skills modules were used. Paper presented at the Rocky Mountain Educational Research Association Annual Meeting, Tucson, Arizona, 1979 (Published by ERIC, 1980.)

Gadzella, B. M., Goldston, J. T., and Zimmerman, M. L. Effectiveness of exposure to study techniques on college students' perceptions. The Journal of Educational Research, 1977, 71, 26-30.

Haslam, W. F., and Brown, W. F. Effectiveness of study-skills instructions for high school sophomores. Journal of Educational Psychology, 1968, 59, 223-226.

Jones, C. B., Trimble, M., and Altman, H. Improving college students' performances through group counseling. Journal of College Student Personnel, 1970, 11, 373-382.

Light, L. L., and Alexakos, C. E. Effect of individual and group counseling on study habits. Journal of Educational Research, 1970, 63, 450-454.

Rubin, H., and Cohen, H. A. Group counseling and remediation: A two-faceted intervention approach to the problem of attrition in nursing education. The Journal of Educational Research, 1974, 67, 195-198.

Tarpey, E. A., and Harris, J. B. Study skills course makes a difference! Journal of College Student Personnel, 1970, 20, 62-67.